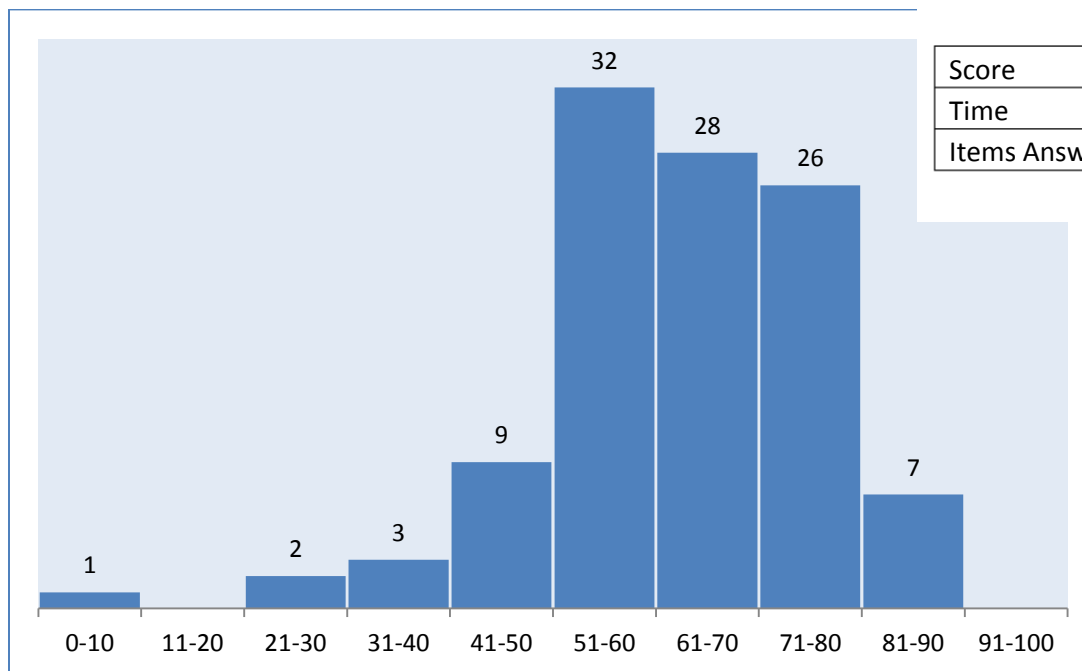


# 11-12 State Results

## AgMET Equipment Fabrication Systems

108 Participants



|                | Min      | Max     | Mean     |
|----------------|----------|---------|----------|
| Score          | 1        | 87      | 61.45    |
| Time           | 00:04:07 | 1:00:00 | 00:30:00 |
| Items Answered | 3        | 100     | 98.9     |

**Average Score: 61**  
**Cut Score: 60**  
**Pass percentage: 58%**

**Assessment: AgMET Equipment Fabrication Systems**  
**Number tested:108**

| <b>Content Standards, Performance Standards, Indicators</b>  | <b>NV State Averages</b> |
|--|--------------------------|
| 1) CONTENT STANDARD 1.0 : DEMONSTRATE GENERAL SHOP SAFETY PROCEDURES   | 87.19%                   |
| 1) PERFORMANCE STANDARD 1.1: UNDERSTAND PERSONAL AND GROUP SAFETY  | 87.19%                   |
| 1) 1.1.1 Demonstrate personal safety precautions in an agricultural mechanics environment  | 91.05%                   |
| 2) 1.1.2 Describe group safety precautions in an agricultural mechanics environment, including lock out/tag out procedures                 | 77.78%                   |
| 3) 1.1.3 Identify safe and unsafe working conditions in the agricultural mechanics environment   | 84.26%                   |
| 7) 1.1.7 Demonstrate appropriate fire extinguisher use   | 87.96%                   |
| 2) CONTENT STANDARD 2.0 : DEMONSTRATE SAFE AND PROPER WELDING PROCEDURES   | 61.35%                   |
| 2) PERFORMANCE STANDARD 2.1: DEMONSTRATE SAFE AND PROPER TECHNIQUES IN OXY/FUEL CUTTING (OFC)  | 72.22%                   |
| 1) 2.1.1 Demonstrate proper safety practices while operating all welding and cutting equipment   | 75.93%                   |
| 3) 2.1.3 Properly assemble oxy/fuel apparatus  | 78.89%                   |
| 5) 2.1.5 Properly cut mild steel to specification  | 31.48%                   |
| 3) PERFORMANCE STANDARD 2.2: DEMONSTRATE SAFE AND PROPER TECHNIQUES IN SHIELDED METAL ARC WELDING (SMAW)                                   | 73.11%                   |
| 1) 2.2.1 Demonstrate proper safety practices while operating SMAW equipment  | 89.51%                   |
| 2) 2.2.2 Select appropriate electrodes for specific applications   | 69.29%                   |
| 3) 2.2.3 Properly adjust SMAW apparatus  | 67.28%                   |
| 5) 2.2.5 Produce three AWS standard welds in the flat and horizontal position  | 74.47%                   |
| 6) 2.2.6 Identify welding electrodes using AWS electrode classification system   | 62.04%                   |
| 7) 2.2.7 Determine the correct shade of lens used for a given application and type of welding process                                      | 69.44%                   |
| 4) PERFORMANCE STANDARD 2.3: DEMONSTRATE SAFE AND PROPER TECHNIQUES IN GAS METAL ARC WELDING (GMAW)  | 48.52%                   |
| 2) 2.3.2 Select appropriate electrodes, contact tips, gas nozzles and diffusers, and shielding gas for specific applications               | 59.26%                   |
| 3) 2.3.3 Properly adjust GMAW apparatus for specific application   | 41.44%                   |
| 5) 2.3.5 Produce three AWS standard welds in the flat and horizontal position  | 47.22%                   |
| 5) PERFORMANCE STANDARD 2.4: DEMONSTRATE SAFE AND PROPER TECHNIQUES IN GAS TUNGSTEN ARC WELDING (GTAW)                                     | 51.39%                   |
| 2) 2.4.2 Select appropriate consumables and shielding gas for specific applications  | 39.81%                   |
| 3) 2.4.3 Properly adjust GTAW apparatus for specific application   | 49.54%                   |
| 4) 2.4.4 Properly diagnose equipment failure   | 48.15%                   |
| 5) 2.4.5 Produce three AWS standard welds in the flat and horizontal position on ferrous metals  | 72.22%                   |
| 6) Performance Standard 2.5 : Demonstrate Safe and Proper Techniques in Plasma Cutting (PAC) Procedures                                    | 41.67%                   |
| 1) 2.5.1 Demonstrate proper safety practices while operating plasma cutting equipment  | 63.89%                   |
| 2) 2.5.2 Select appropriate consumables for specific applications  | 37.50%                   |
| 3) 2.5.3 Properly assemble plasma cutting apparatus  | 25.00%                   |
| 4) 2.5.4 Properly diagnose equipment failure   | 73.15%                   |
| 5) 2.5.5 Properly cut ferrous metals   | 29.63%                   |
| 3) CONTENT STANDARD 3.0: UNDERSTAND THE PRINCIPLES OF ELECTRICITY IN AGRICULTURE   | 46.11%                   |
| 1) PERFORMANCE STANDARD 3.1: UNDERSTAND PRINCIPLES AND THEORIES OF ELECTRICITY   | 41.20%                   |
| 1) 3.1.1 Describe proper safety practices applicable to agricultural electrification   | 88.89%                   |
| 3) 3.1.3 Calculate voltage, current, and resistance using Ohm's Law  | 25.31%                   |
| 2) PERFORMANCE STANDARD 3.2: APPLY THE PRINCIPLES AND THEORIES OF ELECTRICAL CIRCUITS  | 65.74%                   |
| 3) 3.2.3 Explain the function and importance of grounding in electrical circuits   | 65.74%                   |
| 4) CONTENT STANDARD 4.0: UNDERSTAND WATER AND WASTEWATER MANAGEMENT IN AGRICULTURAL AND INDUSTRIAL SETTINGS                                | 17.59%                   |
| 1) PERFORMANCE STANDARD 4.1: DEMONSTRATE SAFE PRACTICES AND PROCEDURES IN AGRICULTURAL AND INDUSTRIAL WATER MANAGEMENT                     | 17.59%                   |
| 1) 4.1.1 Explain the role of water use, management and conservation in the agricultural industry   | 17.59%                   |
| 5) CONTENT STANDARD 5.0: UNDERSTAND PRINCIPLES AND APPLICATIONS IN AGRICULTURAL  | 69.14%                   |
| 1) PERFORMANCE STANDARD 5.1: DEMONSTRATE PRACTICES, APPLICATIONS AND PROCEDURES OF DRAFTING IN AGRICULTURAL PROJECTS                       | 65.28%                   |
| 1) 5.1.1 Differentiate between the various plans used in projects (blueprints, shop plans and wiring schematics)                           | 68.52%                   |
| 3) 5.1.3 Develop a bill of materials from a selected set of plans  | 62.04%                   |
| 2) PERFORMANCE STANDARD 5.2: DEMONSTRATE PRACTICES AND PROCEDURES IN CONSTRUCTION OF AGRICULTURAL PROJECTS                                 | 76.85%                   |
| 1) 5.2.1 Explain safety procedures required while working on a project site, including personal safety, hand and power tools and equipment | 76.85%                   |
| 6) CONTENT STANDARD 6.0: UNDERSTAND PRINCIPLES AND APPLICATIONS OF SINGLE AND MULTIPLE CYLINDER ENGINES                                    | 68.70%                   |

**Assessment: AgMET Equipment Fabrication Systems**  
**Number tested:108**

| <b>Content Standards, Performance Standards, Indicators</b>  | <b>NV State Averages</b> |
|--|--------------------------|
| 2) PERFORMANCE STANDARD 6.2: DEMONSTRATE A WORKING KNOWLEDGE OF THE ESSENTIAL ENGINE OPERATING SYSTEMS   | 68.70%                   |
| 2) 6.2.2 Explain functions of ignition, fuel, cooling, lubrication and compression systems and their interrelationships  | 68.70%                   |
| 7) CONTENT STANDARD 7.0: DEMONSTRATE BASIC SKILLS IN OPERATION, MAINTENANCE AND REPAIR OF AGRICULTURAL MACHINERY   | 66.48%                   |
| 1) PERFORMANCE STANDARD 7.1: DEMONSTRATE SAFE PRACTICES AND PROCEDURES ASSOCIATED WITH THE OPERATION, MAINTENANCE AND REPAIR OF AGRICULTURAL MACHINERY AND EQUIPMENT | 66.48%                   |
| 3) 7.1.3 Explain the importance of preventive maintenance programs and keeping accurate maintenance records  | 49.07%                   |
| 4) 7.1.4 Prepare an applicable piece of equipment for storage  | 62.04%                   |
| 5) 7.1.5 Determine the cost of routine equipment maintenance   | 75.93%                   |
| 7) 7.1.7 Perform manufacturers recommended pre-operation safety inspection   | 72.69%                   |
| 8) CONTENT STANDARD 8.0: IDENTIFY AND DEMONSTRATE THE PROPER USE OF AGRICULTURAL HAND AND POWER TOOLS  | 57.41%                   |
| 1) PERFORMANCE STANDARD 8.1: IDENTIFY GENERAL SHOP HAND AND POWER TOOLS  | 36.42%                   |
| 1) 8.1.1 Identify and explain the safe and proper use of shop hand and power tools   | 36.42%                   |
| 2) PERFORMANCE STANDARD 8.2: DEMONSTRATE APPROPRIATE PROCEDURES FOR THE MAINTENANCE AND REPAIR OF HAND TOOLS   | 78.40%                   |
| 1) 8.2.1 Determine if the tool can be safely used in its present condition or, if damaged, reconditioned/replaced  | 64.81%                   |
| 2) 8.2.2 Demonstrate proper care and storage of tools  | 92.59%                   |
| 3) 8.2.3 Repair a damaged tool to a safe working condition   | 77.78%                   |
| 9) CONTENT STANDARD 9.0: DEMONSTRATE THE OPERATION, MAINTENANCE AND USE OF ELECTRICAL POWER, MOTORS AND CONTROLS IN AGRICULTURAL APPLICATIONS                        | 56.11%                   |
| 1) PERFORMANCE STANDARD 9.1: DEMONSTRATE PROCEDURES ASSOCIATED WITH THE OPERATION, MAINTENANCE AND REPAIR OF ELECTRICAL POWER  | 56.11%                   |
| 1) 9.1.1 Recognize possible safety hazards while working with electric motors and controls   | 29.63%                   |
| 2) 9.1.2 Select and properly use safety equipment appropriate to working conditions  | 37.96%                   |
| 3) 9.1.3 Explain the function of various controls used in electrical applications  | 86.11%                   |
| 4) 9.1.4 Demonstrate a working knowledge of repair manuals and parts manuals   | 67.59%                   |
| 5) 9.1.5 Diagnose and repair common failures relating to electrical motors and controls  | 59.26%                   |
| 10) CONTENT STANDARD 10.0: DESCRIBE THE RELATIONSHIP BETWEEN A SUPERVISED AGRICULTURAL EXPERIENCE (SAE) AND PREPARATION OF STUDENTS FOR A CAREER IN AGRICULTURE      | 60.19%                   |
| 1) PERFORMANCE STANDARD 10.1: ACTIVELY DEVELOP AND PARTICIPATE IN SUPERVISED AGRICULTURAL EXPERIENCE, WHICH ENABLES STUDENTS TO OBTAIN WORK-BASED SKILLS             | 60.19%                   |
| 1) 10.1.1 Identify and describe a career interest in agriculture or agriculture related occupation   | 85.19%                   |
| 3) 10.1.3 Keep accurate records as prescribed by the Nevada State FFA policies and procedures  | 53.94%                   |
| 11) CONTENT STANDARD 11.0: PARTICIPATE IN LEADERSHIP TRAINING THROUGH MEMBERSHIP IN FFA  | 47.69%                   |
| 1) PERFORMANCE STANDARD 11.1: RECOGNIZE THE TRAITS OF EFFECTIVE LEADERS AND PARTICIPATE IN LEADERSHIP TRAINING THROUGH INVOLVEMENT IN FFA                            | 61.11%                   |
| 4) 11.1.4 Demonstrate knowledge of the FFA Code of Ethics, official dress, and the proper use of the FFA jacket  | 61.11%                   |
| 2) PERFORMANCE STANDARD 11.2: UNDERSTAND THE OPPORTUNITIES IN FFA  | 31.48%                   |
| 2) 11.2.2 Identify major state and national activities and awards available to FFA members   | 31.48%                   |
| 3) PERFORMANCE STANDARD 11.3: UNDERSTAND THE IMPORTANCE OF SCHOOL AND COMMUNITY AWARENESS  | 66.67%                   |
| 1) 11.3.1 Discuss the meaning and importance of community service  | 66.67%                   |